

Attorney Docket No.: 392902

**REMARKS**

Claims 1-43 are pending in the application. Claims 1, 24, and 43 are currently amended.

Each of claims 1, 24 and 43 have been amended to recite that the ballot rotation engine operates electronically on demand during the course of an election to perform ballot rotation by generating electronically reconfigured ballot images on demand during the course of an election to implement the schema in a controlled manner facilitating substantially equal statistical fairness in rotation over at least one level selected from the group consisting of an individual voting station, a voting precinct, a group of precincts supported at a polling place, and an entire election jurisdiction.. Support for this amendment may be found in the specification on page 10 at lines 6-23, and other places in the specification.

**Claim rejections—35 U.S.C. §103(a)**

Claims 1, 5-10, 14-22, 24, 28-31 and 34-43 stand rejected under 35 U.S.C. §103(a) over United States Patent No. 5,377,099 issued to Miyagawa in view of Miller (article, The impact of candidate name order on election outcomes.). Miyagawa is used to show an electronic voting system that does not perform ballot rotation. Miller is said to show randomized ordering of candidate names on different paper or punch-card ballots including upward rotation sequencing and full randomization. Applicant respectfully traverses the rejection.

As amended, the independent claims distinguish the combined references by reciting details of how the ballot rotation engine operates. If Miller were combined with Miyagawa, There would be no control over ballot rotation at any particular level that facilitates statistical fairness. This is because Miller was only interested in confirming whether there is a statistical incidence of name-order effects. There is no teaching or suggestion in the combined references that ballot rotation may be performed on-demand by electronic devices during the course of an election with control at any level to facilitate statistical fairness. Appendix B of Miller merely describes ballot rotation procedures where ballots were rotated for various precincts within a country. Each precinct received a single type of ballot. This does not promote substantially equal statistical fairness because different numbers of voters vote at the respective precincts, and the ballot were only rotated on a precinct basis without regard to the number of voters.

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Miller teaches away from what is claimed by implementing a schema at the precinct level without regard to statistical fairness. Furthermore, although the Examiner points to page 317 of Miller for a discussion of randomization, this is suggested only as to rotation of ballot styles at the precinct level and does not overcome the problem of different numbers of voters voting at the respective precincts. Still further, the discussion on page 317 observes a further unresolved problem of periodicity in sequential rotation assignments of the Ohio type, where this problem is also overcome by what is claimed. The combined references fail to teach or suggest the solution that is claimed.

For the record, Applicant's attorney respectfully disagrees with the Examiner's official notice on page 3 of the Office Action that a person of ordinary skill in the computer science art would know how to program such a system as is presently claimed, and insists that if such notice is maintained a reference must be provided. This is further the case for the rejection of claims 6-7, and 8-9 where the Examiner merely assumes that the art teaches these limitations and does not provide a reference.

The rejection of claim 22 as stated on page 5 of the Office Action is in error. Pages 325-326 of Miller do not teach rotation of the ballot so each candidate is first an equal number of times. Those passages merely show rotating the ballots in respective ways for each precinct on the basis of each precinct being assigned a different number that is allocated a unique ballot style. That system most certainly does not result in presentation of ballots so that each candidate is present first in an equal number of voting instances, and this is because different numbers of people inherently vote at the different precincts. Accordingly, the Miller system does not achieve substantial fairness as is now claimed.

Claims 2-4, 13, and 25-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miyagawa and Miller, as applied above, and in further view of United States Patent No. 5,278,753 issued to Graft. Graft is used to show a precinct control unit with a plurality of voting stations. This does nothing to overcome the issues discussed above where the combination of references, even now including Graft, is completely silent as to a manner of electronic ballot rotation to achieve statistical fairness as any particular level.

The remaining claims are dependant claims that necessarily incorporate the limitations of the base claims from which they depend. Although they have patentable merit of their own, the dependant claims are at least patentable for the reasons discussed above.

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Based upon the foregoing discussion, Applicant's attorney respectfully solicits a notice of allowance and earnestly requests the Examiner to telephone if a conversation would expedite prosecution. Although no additional fees are believed to be due, the Office is authorized to charge any additionally required fees to deposit account 12-0600.

Respectfully submitted,

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